# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF OKLAHOMA

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) NO. CIV-17-0186-JH
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#### <u>ORDER</u>

Plaintiffs filed this action against the United States under the Federal Tort Claims Act ("FTCA"), 28 U.S.C. §§ 2671-80. They allege that employees of the Chickasaw Nation Medical Center ("CNMC"), a federally supported health center, committed negligence during the labor and birth of Alexis and Taylor Stokes's son, Baby Boy D.S. causing irreversible brain damage. A non-jury trial was held on September 17-21 and October 16-19. Having considered the testimony and evidence offered both during trial and submitted for review, the court makes the following findings and conclusion.

Alexis Stokes was admitted to CNMC for induction of labor at 9 p.m. on May 15, 2016. Her pregnancy to that point had been without complication. Pursuant to doctor's orders,<sup>1</sup> Pitocin was started at 6:18 a.m. the next day, <sup>2</sup> May 16, to increase Mrs. Stokes's

<sup>&</sup>lt;sup>1</sup> The court will refer to these as "doctor's orders," although some of the orders governing the care of Mrs. Stokes and related to the use of Pitocin were placed by Ashley Curtis, a certified nurse midwife, in addition to those entered by Frank Nwanko, M.D. The orders were essentially indistinguishable.

<sup>&</sup>lt;sup>2</sup> The drug is used to stimulate both the number and quality of the patient's contractions.

contractions. The physician's order for Pitocin required the attending nurse to increase the amount of Pitocin or decrease it depending on the fetus' ability to tolerate the drug. Uterine contractions restrict the flow of blood and oxygen to the fetus. If too strong and/or too frequent they can cause fetal distress. An electronic fetal monitor ("EFM") was used to monitor the fetus' heart rate ("FHR"). An Intrauterine Pressure Catheter ("IUP"), placed in Mrs. Stokes's uterus, measured the strength (peak pressure) of her contractions, their frequency, their length, and the resting uterine pressure between successive contractions, also referred to as "resting tone." The fetal heart rate and the uterine activity were displayed on the same computer strip, printed at bedside in Mrs. Stokes's room. A digital image of the strip was available at any of the computer monitors in the labor and delivery area of CNMC, including a central monitor at the front of the nursing unit.

When labor started the fetal heart strip pattern indicated Baby Stokes was healthy and well-oxygenated. The fetus's heart rate (beats per minute) plus accelerations or decelerations of the heart rate are considered when determining the fetus's condition. Fetal heart rate strips fall within one of three categories: Category 1 is considered to be a normal heart rate, Category 2 can be reassuring or nonreassuring and Category 3 indicates fetal distress. Variabilities or fluctuation in the fetal heart rate and accelerations are signs that the baby is well-oxygenated. A decrease in variability (minimal or lack of variability) and late decelerations<sup>3</sup> are concerning. Recurrent (occurring with more than 50 percent of the

<sup>&</sup>lt;sup>3</sup> A late deceleration begins after the start of a contraction, reaches its lowest point after the contraction peaks and returns to baseline after the contraction has completed.

contractions) decelerations combined with minimal or no variability in the fetal heart rate are signs of a Category III strip. Once that point is reached, the baby's hypoxic (lack of oxygen) condition must be corrected in utero or the fetus must be delivered. No one disagrees that Baby Stokes was well oxygenated when labor began or that that the strip became a Category 2 around 1:15 a.m. on Tuesday morning. The disagreement is whether and when it became a nonreassuring Category 2 strip and when or if it became a Category 3 strip.

Mrs. Stokes's labor progressed through the day on Monday with the Pitocin being administered in accordance with the doctor's orders. The Pitocin was to be decreased if the resting tone between contractions was less than a minute or the pressure measured by the IUP exceeded 30 millimeters of mercury for more than ten minutes after confirmation by either manual palpation or verifying the IUP placement and reading. Increases were subject to fetal tolerance, which meant a reassuring FHR, no more than five contractions in a ten minute window and at least one minute of resting tone between contractions. If there were persistent FHR decelerations or there was a FHR deceleration below 90 beats per minute that lasted longer than one minute the Pitocin was to be stopped and the provider (either the doctor or certified nurse midwife on call) called immediately. Plaintiff's Exhibit 1, p. 590.<sup>4</sup> Terbutaline was to be administered to relax the uterus and slow/stop the contractions if the FHR was below 90 for more than a minute.

<sup>&</sup>lt;sup>4</sup> Page references are to the CM/ECF document and page number or to the Trial Exhibit and Bates number.

Tamara Daniel became Mrs. Stokes's assigned nurse at 8 p.m. Monday evening.<sup>5</sup> Prior to that time the nurse assigned to Mrs. Stokes had regulated the Pitocin in accordance with the doctor's orders. However, beginning around 9:50 Monday evening, due to abnormal contractions -- the resting tone between contractions exceeded 30 millimeters of mercury and at times the interval between them was less than a minute -- Nurse Daniel repeatedly failed to comply with the orders. She did not decrease or stop the Pitocin and she failed to contact the provider (the doctor or certified midwife on call). Instead she increased the level of Pitocin twice.

Baby Stokes tolerated the contractions until approximately 1:19 a.m. Tuesday morning. At that time there were significant decelerations in his heart rate.<sup>6</sup> While the nurse decreased the Pitocin and took other intrauterine resuscitative measures,<sup>7</sup> she failed to turn off the Pitocin, give Mrs. Stokes Terbutaline or call the provider. From that point his condition, as reflected by the FHR strip, was concerning. The strip deteriorated to a nonreassuring category 2.<sup>8</sup> It had minimal variability, at times the heart rate was excessive

<sup>&</sup>lt;sup>5</sup> During the shift change, the nurse who had previously been assigned to Mrs. Stokes, told Nurse Daniels that Mrs. Stokes was sensitive to Pitocin.

<sup>&</sup>lt;sup>6</sup> Dr. Hankins, one of plaintiff's experts who is board certified in obstetrics and gynecology, testified that the decelerations were significant because of their duration and the depth to which they fell.

<sup>&</sup>lt;sup>7</sup> These are procedures designed to resuscitate the baby while he or she is still in utero and include decreasing the Pitocin, a maternal position change, and proving the mother with an IV fluid bolus and oxygen.

<sup>&</sup>lt;sup>8</sup> Dr. Hankins testified that at 1:50 the fetus was "not hypoxic or acidemic, or certainly, if it has been hypoxic, it has only been transient and not enough to lead to acidemia." Doc. #183, p. 31.

or tachycardic and there were recurrent late decelerations. However, neither the midwife nor the doctor was contacted or alerted. By at least 2:40 a.m. the fetal heart rate strip was a Category 3 or, as referred to by several of the experts, sinuosoidal.

The bedside nurse, Tamara Daniel, contacted the certified midwife at 2:50 a.m. Nurse Daniel testified that she was concerned about the infant's heart rate. Looking at the FTR strip, she stated she could not verify the baseline and did not know "if these are true variable, if that's accelerations." Court Exhibit 1. The midwife was just told that they were ready for her in the labor room. When she arrived, she was not informed about the fetal heart tones. After the mother had pushed a couple of times, the midwife realized it was not effective. She called the physician, Dr. Frow, as she was concerned whether Mrs. Stokes, because of exhaustion, would be able to deliver the baby. Dr. Frow arrived around 3:15. He reviewed only a small segment of the strip and relied on the nurse's report that the fetus' heart tones had been normal. He examined Mrs. Stokes and then performed a vacuum-assisted delivery.

Baby Stokes was born at 3:43 a.m. He was placed on Mrs. Stokes's chest but was quickly removed. Dr. Frow explained to Mr. and Mrs. Stokes that the baby was stunned but fine. A little later another member of the medical team told Mrs. Stokes that that the baby's heart rate was reasonable and he was going to be okay but required oxygen.

At birth Baby Stokes was not breathing and was flaccid with a heart rate of about 42 beats per minute. He was placed on a heater and given oxygen by an Ambu bag. His heart rate increased. A code blue was called nine minutes after birth and the baby was intubated by a CNMC emergency room physician, Dr. Gearhart. He used a 3.0 diameter

intubation tube. When the baby's oxygen saturation levels remained low, a certified respiratory nurse anesthetist replaced the tube with a 4.0 mm tube. Baby Stokes's oxygen saturations levels then increased. Dr. Balogun, a pediatrician, arrived in the delivery room around 4:10 and a few minutes later Baby Stokes was moved to the hospital nursery. He was placed on a ventilator but continued to be nonresponsive.

Dr. Balogun contacted Dr. Bailey, a neonatologist at Children's Hospital, part of the University of Oklahoma College of Medicine, at 4:30 a.m. regarding transferring Baby Stokes to Children's Hospital. CNMC did not have the capability to provide the infant with the care he required. Children's transport team was picking up another infant at the time but was to proceed to CNMC once that assignment was completed.<sup>9</sup> Dr. Balogun began treating Baby Stokes as instructed by Dr. Bailey, including passively cooling the infant. While they were waiting for the transport team, Drs. Balogun and Bailey spoke again. They agreed that because of his dire condition Dr. Balogun should discuss with Mrs. Stokes having Baby Stokes remain at CNMC where she would have the opportunity to hold him. If the baby was transported he would be separated from his parents and it was uncertain whether the physicians at Childrens would be able to preserve his life. Dr. Balogun indicated she wanted to try and verify the severity of the baby's condition by further testing. She stated she would talk to Mrs. Stokes and would call Dr. Bailey back. At that point the team was on its way to CNMC. Dr. Balogun called Dr. Bailey again at 6:20 and related that the baby's current condition, based on the second lab results, had not

<sup>&</sup>lt;sup>9</sup> Because of weather conditions the team had to drive rather than use its helicopter.

improved. Dr. Balogun decided the baby should not be transported and Dr. Bailey said she agreed with that decision. The transport team was advised to return.

Dr. Balogun then spoke with Mr. and Mrs. Stokes and informed them that because of the baby's poor prognosis CNMC had decided he should not be transported. At that time, they were in the nursery with Baby Stokes. They had first learned something was wrong when a nurse came into the delivery room with papers for them to sign authorizing the baby's transfer to Children's Hospital. When the nurse realized the parents were unaware of his condition she left the room and went to find Dr. Balogun. She could not locate the pediatrician, so she returned to Mrs. Stokes's room and took her in a wheelchair, along with Mr. Stokes, to the nursery to see the infant. That was where Dr. Balogun approached the family to discuss the infant's prognosis and inform them about CNMC's decision not to transfer the baby.

Mrs. Stokes told Dr. Balogun that they wanted the baby transported to Childrens. A phone call was arranged with Dr. Bailey, who explained to Mrs. Stokes that she agreed with Dr. Balogun's concerns. She stated that she was worried about the outcome even with treatment but was willing to do whatever the family wanted. Dr. Bailey reiterated that her major concern was separating Mrs. Stokes from her baby because of his condition. The CNMC staff worked to discharge Mrs. Stokes quickly so she and Mr. Stokes could join Baby Stokes in Oklahoma City. Baby Stokes was picked up by the transport team in Ada and admitted to Childrens Hospital on May 17th. He was discharged from the hospital on July 5, 2016.

Baby Stokes is severely disabled. He can do partial rolls (roll side to back and back to side) but cannot roll over completely. He is not expected to crawl or walk. He can, if facilitated, bring his head up and hold it for as long as a minute, but he cannot do it independently or consistently. He cannot speak. While he has repeated sounds, the verbalizations are not consistent. Baby Stokes is tube fed. He has made responses, possibly to changes in light, but has been diagnosed as cortically blind. He has activated a toy with his left leg. The evidence did not demonstrate, though, that any of Baby Stokes's behavior occurred consistently or could be considered volitional. On cross examination, Dr. Kornberg, one of plaintiffs' experts, admitted that during his examination of Baby Stokes he neither saw any indication that the child had the ability to fixate visually nor did he observe any intentional movements.

During the two years after his initial release from Childrens Hospital, Baby Stokes had only one brief hospital stay for pneumonia in November 2016.<sup>11</sup> However, beginning in May 2018, he had four sequential hospital admissions for respiratory illnesses. From May 19-June 14, 2018, and from July 31 to August 20, 2018, he was hospitalized because of bacterial pneumonia. From August 30 to September 3 he was hospitalized because of aspirational pneumonia. Baby Stokes was readmitted to Childrens on September 26, 2018, where he was being treated for bacterial pneumonia. During the second week of trial he

<sup>&</sup>lt;sup>10</sup> According to defense expert Jerry Tomasovic, M.D., for movement to be volitional, it must be consistent.

<sup>&</sup>lt;sup>11</sup> The medical personnel agreed that Mr. and Mrs. Stokes have provided excellent care for Baby Stokes.

was being slowly weaned from a ventilator and was scheduled for surgery for a tonsillectomy as a possible way to avoid the need for a tracheostomy. Some gains did result, though, from the hospitalizations. Baby Stokes's feeding tube was changed, resulting in a significant weight increase, his seizure medication was reduced, and the doctors discovered he was anemic and corrected the deficiency.

To recover from the government under the FTCA, a plaintiff must establish that the injury at issue was "caused by the negligent or wrongful act or omission of any employee of the Government ... under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred." <u>Gallardo v. United States</u>, 752 F.3d 865, 870 (10th Cir. 2014) (quoting <u>Harvey v. United States</u>, 685 F.3d 939, 947 (10th Cir.2012)). It is undisputed that the CNMC employees involved in the care and treatment of Alexis and Baby Stokes are considered to be federal employees for purposes of the FTCA.

The FTCA requires the court in this case to apply Oklahoma state law "to resolve questions of substantive liability." *Id.* (internal quotation marks omitted). Under Oklahoma law medical malpractice claims are treated like a negligence action. "The elements of a medical malpractice action are "(1) a duty of care owed by the defendant to the plaintiff, <sup>12</sup> (2) a breach of that duty, (3) an injury, and (4) causation." <u>Jennings v.</u> Badgett, 230 P.3d 861, 865 (Okla. 2010). The main element at issue here is that of

<sup>&</sup>lt;sup>12</sup> In Oklahoma "[t]he standard of care required of those engaging in the practice of the healing arts . . . shall be measured by national standards." 76 Okla. Stat. 20.1.

causation. Defendant admitted to certain breaches of the standard of care by its staff during labor.

Nurse Daniel breached the standard of care when she failed to comply with the doctor's orders.<sup>13</sup> Beginning late Monday evening she increased the Pitocin when she should have decreased or stopped it and failed to contact the provider when the uterine contractions and fetal heart tones were abnormal.<sup>14</sup> The improper administration of Pitocin deprived the baby of adequate oxygen in utero because of its effect on the contractions – an excessive dose causes more frequent contractions and higher uterine pressure. The nurse's delay in contacting the providers, the certified midwife and Dr. Frow, the obstetrician who delivered Baby Stokes, prevented them from timely assessing the condition of both Mrs. Stokes and Baby Stokes. Instead, Dr. Frow was unaware that there were any concerns regarding the fetus, as evidenced by his comment to the pediatric neurosurgeon Dr. Bailey that "[t]he fetal heart tones were – reassuring throughout labor." Dr. Frow testified that if he had been advised around 1 or 1:30 a.m. Tuesday morning about the abnormal uterine contractions and fetal heart tones he would have made further inquiry

<sup>&</sup>lt;sup>13</sup> Although the exact parameters were not identified, when the fetal heart rate became concerning the fetal monitor would automatically trigger an audible alarm on the computer system. Baby Stokes's monitor repeatedly triggered the alarm beginning Monday night, May 16, 2018, until approximately thirty minutes before his birth. The alarm was turned off repeatedly by other CNMC medical personnel, who followed the hospital practice of verifying that a nurse was in the room with the patient and then assuming the matter was being handled. Plaintiff's Exhibit 23.

<sup>&</sup>lt;sup>14</sup> Nurse Daniel admitted during her deposition that she failed to comply with the doctor's orders in conjunction with the administration of Pitocin to Alexis Stokes. Court Exhibit 1.

<sup>&</sup>lt;sup>15</sup> Jt. Exhibit 12, p. 33.

regarding the situation, including proximity to delivery and the effect of resuscitation efforts, to determine whether the cesarean section crew should be called and a pediatrician notified.

Dr. Frow was not called until after 3 a.m. By that time the fetus had been progressively deprived of oxygen and his condition had deteriorated. The experts, except for Dr. McLain, <sup>16</sup> all agreed that by 2:30/2:40 the strip was a Category III. At that point the baby had to be delivered or the condition of hypoxemia remedied. Neither occurred until later.

The baby was hypoxic when he was born and resuscitation was delayed. If Dr. Frow had been aware of the abnormal fetal heart tones he would have asked a pediatrician to be present at the birth in case it was necessary to attempt to resuscitate and assess the baby. Dr. Balogun could have intubated Baby Stokes within five minutes if she had been present when he was born. Instead, the infant was not intubated until he was 18 minutes old.

The court concludes Baby Stokes suffered a hypoxic ischemic injury resulting from events which occurred late in labor and from the delayed resuscitation. Although the issue of causation was strongly contested by the government and is not free from doubt, the court was persuaded by the testimony of plaintiff's experts, who relied on multiple factors to support their diagnosis of cerebral palsy and spastic quadriplegia<sup>17</sup> due to hypoxic ischemic

<sup>&</sup>lt;sup>16</sup> The other experts were Drs. Hankins, Ward and Frow. The court found Dr. McLain to be an entirely credible witness, but concluded that the weight of the evidence established the facts as indicated.

<sup>&</sup>lt;sup>17</sup> It is undisputed that Baby Stokes suffers from mixed Cerebral Palsy with Spastic Quadriparesis. Doc. #162, p. 6.

encephalopathy.

The infant's first blood gas showed severe, almost lethal, acidosis. <sup>18</sup> Acidosis is the buildup of excess acid in the blood due to the lack of oxygen. As explained by Dr. Ward, plaintiff's causation expert, during each contraction the blood flow to the fetus and the exchange of oxygen and carbon dioxide slows or stops. If the contractions are too close together a period of oxygen deprivation begins. The tissue will not have sufficient oxygen to continue aerobic metabolism and builds up acid. Based on the arterial blood gas results Dr. Bailey, the neonatologist from Children's Hospital, <sup>19</sup> was immediately concerned about "the asphyxia that [had] occurred" and "the effect of the lack of oxygen to the brain." Joint Exhibit 12, p. 28.

Dr. Ward testified that Baby Stokes's failure to respond to resuscitation efforts, as reflected by his Apgar scores, was consistent with his being asphyxiated in utero for a sustained period prior to birth. He explained that if the asphyxia in utero happens shortly before birth, for example ten to fifteen minutes, an infant will respond very quickly to an effective resuscitation. That did not happen, though, with Baby Stokes, despite the efforts of the hospital staff to revive him.

Additional testing that was done, including blood cultures, and an ultrasound and

<sup>&</sup>lt;sup>18</sup> One of the undisputed facts was that "Baby Stokes had severe metabolic acidosis at birth as evidenced by a blood acid pH of 6.77 and a base excess of negative 24 (-24) as reported in the first blood laboratory report available which is timed at 4:27, approximately 44 minutes after birth." Doc. #162, p. 6.

<sup>&</sup>lt;sup>19</sup> Dr. Bailey was provided with the infant's arterial blood gases results.

MRI of Baby Stokes's brain,<sup>20</sup> suggest that the cause was not an infection or a genetic abnormality. The baby's normal size and metabolic condition upon first arriving in utero at the hospital also indicate his injuries were not due to a placental insufficiency or abnormality, but the result of something that occurred during labor and delivery.

In situations like this, the evidence will rarely, if ever, be conclusive, but that is not required. Rather, plaintiffs must ordinarily establish the elements of their claim by a preponderance of the evidence. Plaintiffs have met their burden of proof and demonstrated causation.<sup>21</sup>

Plaintiffs did not, though, show by clear and convincing evidence that the conduct of defendants' employees rose to the level required to lift the cap on noneconomic damages. Under 23 Okla. Stat. § 61.2,<sup>22</sup> noneconomic damages in an action arising from a claimed bodily injury are limited to \$350,000.00 unless the fact-finder finds by clear and

<sup>&</sup>lt;sup>20</sup> At the conclusion of the trial the court asked the parties to submit the principal causation articles or studies their witnesses had discussed. Plaintiffs submitted several articles which were not referred to by any witness but which, they stated, appeared to be related to the causation issue. In fairness to defendant, the court has not considered the articles as they are beyond the scope of its request and are not part of the evidence in the case.

<sup>&</sup>lt;sup>21</sup> Defense expert Dr. Radetsky, like all the physicians, was a credible witness, but the criteria or elements he used from "Neonatal Enchephalopathy and Neurologic Outcome" in support of his causation opinion, were strongly contested. In addition, due to the particular circumstances of this case the court was not persuaded by his other authorities. For example, in "Clinical Associations with Uterine Tachysystole," the subjects had excessive uterine contractions, defined by the study as more than 15 contractions in 30 minutes, but it is unclear what their resting pressure was. CNMC's authorized upper resting pressure limit of 30 mmHg was higher than that used by many hospitals and the 15-20 mmHg limit suggested by the FDA package insert for Pitocin.

<sup>&</sup>lt;sup>22</sup> Plaintiffs challenge the statute on constitutional grounds. That issue is pending before the Oklahoma Supreme Court. Until a decision issues, the court presumes the state statute is valid.

convincing evidence that the defendant's acts or failures to act were in reckless disregard for the rights of others, grossly negligent, fraudulent, or done intentionally or with malice. *Id.* The conduct alleged and established here did not go beyond simple negligence. There was no evidence of similar prior incidents involving Nurse Daniels and, while Dr. Balogun made an error in judgment,<sup>23</sup> there is no basis for concluding that any of the conduct that occurred was sufficiently egregious to lift the cap.<sup>24</sup>

#### Life Expectancy

The principal elements of plaintiffs' requested damages depend on the expected lifespan of Baby Stokes and the parties disagree as to that life expectancy.<sup>25</sup> Plaintiff's experts, both the physicians and the statistician, Dr. Shott, estimated the child's life expectancy at between 50 and 55 years.<sup>26</sup> Defendant's experts on the issue, Dr. Tomasovic and Dr. Reynolds, a statistician, estimated Baby Stokes life expectancy at 12 to 15 and 19 years, respectively.

<sup>&</sup>lt;sup>23</sup>It was evident from the audio recording of Dr. Balogun's conversations with Dr. Bailey that she was extremely concerned about Baby Stokes and her failure to consult the Stokes before cancelling the transport, while erroneous, was not the result of indifference or malevolence.

<sup>&</sup>lt;sup>24</sup>No expert suggested that the delayed transfer contributed to Baby Stokes's injuries. CNMC medical personnel had already started cooling the infant and providing other treatment. There is therefore no basis for concluding that Dr. Balogun's conduct, and the delay in transportation of Baby Stokes, contributed to his injuries.

<sup>&</sup>lt;sup>25</sup> All the experts in this case were well qualified. That has made both the causation issue and particularly the life expectancy issue difficult.

<sup>&</sup>lt;sup>26</sup> Dr. Shott determined that if it were probable that Baby Stokes could reach a certain level of motor functioning, then his life expectancy could extend to a total of 73.6 years.

The statisticians principally relied on two different databases in reaching their conclusions. Dr. Shott used a spinal cord injury database in her analysis. The only information Dr. Shott had about the individuals in that database was that they had high level spinal cord injuries (Level C1 to C4),<sup>27</sup> were not ventilator-dependent and had survived one-year post-injury. She did know if they had other limitations which affect life expectancy such as whether, for example, the individuals were tube fed or the extent of their cognitive abilities.<sup>28</sup> Dr. Shott also testified that the individuals in the spinal cord database were tetraplegic, which meant they could not use any of their four limbs but "[might] be okay holding their head." Court Exhibit 2. However, as has been discussed, Baby Stokes lacked the ability to hold his head consistently or for more than a brief than a brief period. Plaintiffs' experts testified regarding the significant relationship between head/neck control and life expectancy.

In deriving his estimate, Dr. Reynolds mainly relied on an article regarding the survival probabilities and life expectancies for individuals with cerebral palsy.<sup>29</sup> The subjects of the study were children with cerebral palsy, aged 4 years or older, who had been

<sup>&</sup>lt;sup>27</sup> Spinal cord injuries can be classified based on where on the spinal cord the damage occurred.

<sup>&</sup>lt;sup>28</sup> Dr. Stott assumed that at least some of the individuals would be tube fed and have cognitive dsyfunction, but she did not know the percentage.

<sup>&</sup>lt;sup>29</sup> There were enough differences between the Australian and British studies with which plaintiffs attempted to impeach Dr. Reynolds that the court was not persuaded to disregard his testimony.

clients of the California Department of Developmental Services between 1983 and 2010.<sup>30</sup> Life expectancy estimates were determined based on the participants' characteristics, specifically their gross motor functions (divided into categories including walking, rolling, lifting head) and whether they were tube fed or could feed themselves.

Considering Baby Stokes' overall cognitive and physical abilities, his developmental progress, including the extent of his head and trunk control, his recent successive hospitalizations for respiratory issues,<sup>31</sup> and the multiple opinions and rationales of the various experts, the court concludes that Baby Stokes' life expectancy is 22 years.

## Economic Damages<sup>32</sup>

# Life Care/Medical Expenses

Plaintiffs have suggested, and defendant has not disputed, that the appropriate measure of plaintiffs' future life care, including medical, expenses is determined by the

<sup>&</sup>lt;sup>30</sup> Dr. Stott criticized the California database mainly on two grounds. First, its patients were the recipients of government-provided medical care, which she stated was substandard to the private care received by the patients in the spinal cord database. Second, the California database included patients from the 1980's when medical care was not as advanced as it was a decade or two later. The court did not find either reason a sufficient basis to discount Dr. Reynold's opinion entirely.

<sup>&</sup>lt;sup>31</sup> The court recognizes that it is not uncommon for children in Baby Stokes' condition to be hospitalized. However, the successive stays were lengthy, occurred within a short period of time and, although only one was for aspirational pneumonia, all were for respiratory illnesses, which are a major concern for children like Baby Stokes.

<sup>&</sup>lt;sup>32</sup> Under Oklahoma law in a negligence action the measure of damages "is the amount is the amount which will compensate for all detriment proximately caused thereby, whether it could have been anticipated or not." 23 Okla. Stat. § 61. While defendant disputed the amount of damages which plaintiffs seek to recover, it did not challenge basing any recovery on projected life care expenses in a home, rather than institutional, setting nor does it, for the most part, challenge the specific categories of damages sought.

scope of a life care plan. Using a life expectancy of 55 years, plaintiffs submitted a comprehensive plan which covers Baby Stokes's various anticipated needs, including evaluations, medical and therapeutic treatment, equipment, supplies, medications, attendant care, transportation, and housing renovations. Instead of submitting its own plan, defendant reviewed plaintiffs' life care plan. The government agreed with many of the suggested items, but found others were not appropriate, generally on the ground that Baby Stokes would not benefit from the item because of the degree of his impairments.

The court has adjusted plaintiff's plan based on its findings regarding both the life expectancy and the child's physical and cognitive limitations. It agrees with defendant's expert, Susan Riddick Grisham, that some of the included items are not warranted, such as occupational therapy, a feeding chair, and a companion service dog.<sup>33</sup> Others, including some of the surgical interventions that Ms. Grisham suggested be excluded, the court has found to be reasonably necessary expenses. The bulk of the plan's cost is attributable to the skilled nursing care Baby Stokes will require. The court has not discounted that item based on the expectation that Baby Stokes will be attending school. The court's estimated life expectancy was premised in large part on the child's functional disabilities, both cognitive and motor, which do not suggest that public school will be a realistic option.

Based on an estimated life expectancy for Baby Stokes of 22 years, the court concludes plaintiffs' reasonable future life care expenses will be the sum of \$12,127,000, which has been reduced to present value, as explained subsequently.

<sup>&</sup>lt;sup>33</sup> This it's not an exhaustive list, but only a few examples.

Plaintiffs are entitled to recover past medical expenses that have been paid on behalf of Baby Stokes. Under Oklahoma law, in a personal injury action a party may recover "the actual amounts paid for any services in the treatment of the injury party . . . . not the amounts billed for such expenses incurred in the treatment of the party." 12 Okla. Stat. § 3009.1(A). If there is evidence of payment, the statute authorizes the admission into evidence of a "signed statement acknowledged by the medical provider or an authorized representative . . . that the provider will accept the amount paid as full payment of the obligations." *Id.* Here plaintiffs offered a summary of amounts billed from May 17, 2016, through April 2018, Plaintiff's Exhibit 140, but failed to demonstrate that those amounts had been paid or to otherwise satisfy the requirements of 12 Okla. Stat. § 3009.1 to allow them to recover the amount they seek. Based on the affidavits of billing defendant submitted, plaintiffs are, though, entitled to damages for past medical expenses in the amount of \$339,245.20. *See* Defendant's Exhibits Nos. 14-20; Doc. #207, pp. 4-6.

## **Lost Earnings**

Baby Stokes is entitled to future lost earnings in the amount of \$1,000,000, which sum has been reduced to present value.<sup>34</sup> Mrs. Stokes is entitled to be reimbursed for the care she has provided Baby Stokes in the amount of \$200,000.<sup>35</sup> She also is entitled to lost

<sup>&</sup>lt;sup>34</sup> The government did not challenge the amount plaintiffs proposed as Baby Stokes's lost future earnings. Mr. Clark did not address Baby Stokes's future earnings in his expert report or his trial testimony.

<sup>&</sup>lt;sup>35</sup>In assessing Mrs. Stokes's economic losses, defendant's expert proposed that she be compensated for the benefits and earnings she lost before trial, the total sum of \$58,736, see Defendant's Exhibit 8. rather than for the care she provided for Baby Stokes. If she were paid for both she would in effect have a double recovery.

future earnings<sup>36</sup> in the amount of \$350,000, which sum has been reduced to present value. This figure has been calculated based on both the estimated life expectancy of Baby Stokes and the expectation that, although Baby Stokes will be provided with full time skilled nursing care so that Mrs. Stokes could work part-time, she will be required to spend some time overseeing and organizing that care.

#### Non-Economic Damages

Each plaintiff is entitled to non-economic damages in the amount of \$350.000. For the reasons previously stated, the court has concluded that the cap imposed by the applicable statute should not be lifted.

#### Reduction to Present Value

The future damages which have been awarded – the costs of care for Baby Stokes and the lost future earnings of both Baby Stokes and Mrs. Stokes – must be reduced to present value. The court must consider both the effects of investment and inflation. Hull v. United States, 971 F.2d 1499, 1510 (10th Cir. 1992). Plaintiffs' expert, Dr. Horrell, and defendant's expert, Dr. Clark, disagreed as to the interest and inflation rates that should be used to compute the present value of certain future damages.

Dr. Clark applied a 1.85% net discount rate to Mrs. Stokes's claim for lost future income<sup>37</sup> He derived that number by subtracting the average annual percentage increase in private sector wages from 1960-2014 (3.93%) from the average annual yield on a

<sup>&</sup>lt;sup>36</sup> The lost earnings award takes into account both lost wages and lost benefits.

<sup>&</sup>lt;sup>37</sup> Dr. Clark did not prepare an estimate of Baby Stokes's potential lost earnings.

portfolio of mixed U.S. Treasury bonds during the same period (5.78%). He applied different net discount rates to reduce both Mrs. Stokes's lost benefits and Baby Stokes's expected life care expenses to present value. He subtracted the inflation rates from the 1965-2014 average annual yield on high grade municipal bonds (5.92%) and derived net discount rates ranging from 0 to 1.82%.

Dr. Horrell made adjustments for inflation when calculating lost future income by using the Consumer Price Index ("CPI") average from 1987-2016. When estimating future life care expenses, he used an average of CPI and medical CPI to calculate the projected increase in medical costs (30-year average 2.61%). Dr. Horrell then applied a discount rate for the future time period using the yields from U.S. Treasury bonds between 2017-2046 (30-year average 2.26%). The inflation rates Dr. Horrell used exceeded the low, conservative interest rates used. *See* Plaintiff's Exhibit 35.

Both experts acknowledged that the present value calculation borders on speculation because it requires a determination of projected future interest rates and projected inflation rates, neither of which are really ascertainable with any degree of certainty. The court concludes with respect to future life care costs, taking into account the current inflation rate of medical costs, current interest rates, and the disparity between the experts' opinions, that a net discount rate of 0 percent is appropriate for calculating the future life care costs in this case.<sup>38</sup> With respect to the lost future income of both Baby Stokes and Mrs. Stokes,

<sup>&</sup>lt;sup>38</sup> The court recognizes that parity between investment interest rates and inflation rates is not to be assumed, see <u>Hull</u>, 971 F.2d at 1511, and it has not done so in this case. The number selected is between the estimated net discount rates of the parties' experts. In making its calculation, the court considered escalating medical costs and assumed a reasonable, but secure

the court has reduced the damage awards to present value using a net discount rate approximating 1 percent, which the court found to be appropriate considering the parties' submissions, particularly the variance between the 5.78 average annual Treasury bond yield relied upon by the government and the 2.26% average relied upon by plaintiffs.

### Payment

The damages to be awarded are, in substantial part, for life care expenses that will be incurred in the future. However, notwithstanding the assurance that the federal government will be sufficiently solvent to pay those future expenses as they are incurred, "courts cannot subject the government to ongoing [payment] obligations." Hull, 971 F.2d at 1505. That circumstance requires the court to consider both the reduction to present value discussed above, and whether structural protections via a trust or otherwise should be considered to ensure that the funds are actually used to care for the child and to avoid a windfall to plaintiffs if Baby Stokes dies earlier than the life expectancy that is the basis for the projected future damages.

The court has the inherent authority to order a trust or similar relationship to ensure the funds are used for the child's benefit.<sup>39</sup> *Id*. That inherent authority does not, however, extend to avoiding the potential for a future windfall to the other plaintiffs in the event of

rate of return. It was not required, as plaintiffs urged, to use the Treasury Bill rate, as <u>Jones & Laughlin Steel Corp. v. Pfeifer</u>, 462 U.S. 523 (1983), the case relied upon by Dr. Horrell, was not an action brought under the FTCA. See <u>Hull</u>, 971 F.3d at 1510-1512.

<sup>&</sup>lt;sup>39</sup> Here, the court has no reason to doubt that the child's parents will continue to act in Baby Stokes's best interests. By all accounts, they have been "hypervigilant" parents and the chances of them acting in other than the child's interest are sufficiently remote that no special protection is warranted on that ground.

Baby Stokes's premature death. *See* Hull, 971 F.2d 1505. Oklahoma law, however, is more expansive in its reach than is the court's inherent authority in this area, and appears to specifically contemplate protection to a defendant from the prospect of an earlier - than - projected death and the consequent potential windfall to the child's estate. It allows a court to order future damages to "be paid in whole or in part in periodic payments rather than by a lump-sum payment." 23 Okla. Stat. § 9.3. The periodic payments period may not, though, exceed seven years. If the recipient dies before the conclusion of the specified payment period, money damages awarded for lost future earnings are continued to be paid to the estate of the recipient of the award without reduction, while any medical payments cease.

Under the FTCA the United States generally is liable "in the same manner and to the same extent as a private individual under like circumstances." 28 U.S.C. § 2674. "To achieve this outcome, courts may 'craft remedies that approximate the results contemplated by state statutes." Dixon v. United States, 900 F.3d 1257, 1262 (11th Cir. 2018) (quoting Dutra v. United States, 478 F.3d 1090, 1092 (9th Cir. 2007)). The court concludes that, based on Oklahoma's statute, payment of the future life care expenses should be paid to a trust and that the trust already established by plaintiffs, which is subject to the control and

<sup>&</sup>lt;sup>40</sup> The court recognizes the Tenth Circuit's admonition that its determination regarding what form or structure of damages best serves Baby Stokes's interest should be made from his perspective only. <u>Hull</u>, 971 F.3d at 1505. However, in a situation such as exists here, where the monies are deposited in a trust and the trustee (here a bank) is directly involved in the caregiving decisions, it does not affect the child's interest either way for sums designated for future health care expenses to revert to the payor in the event of the child's untimely death.

oversight of the District Court of Pontotoc County, State of Oklahoma, is an appropriate vehicle. Doc. #203-1. The trust must be modified, though, in one respect --payments must be concluded within seven, rather than fourteen years. That will affect the payment obligations to the tortfeasor outlined in paragraphs 2.06.04b -2.06.04c. The fraction of assets payable to the United States should decline yearly, rather than every two years, as specified in paragraph 2.06.04b, so that at the end of seven years no amount is payable to the government.

Therefore, the damages award for Baby Stokes's future life care expenses, \$12,127,000, is directed to be transferred to a trust in the form attached as Exhibit 1 to Doc. 203, with the specified modifications as indicated. The modification of the trust shall be a pre-condition to defendant's obligation to pay the referenced funds, and shall be accomplished within thirty (30) days of the final resolution of this case, including any appeals. The award will be subject to distribution as stated in the trust's provisions, and in the proportions indicated upon various life contingencies.<sup>41</sup> The remainder of the damages will be paid directly to plaintiffs in the following amounts:

Baby Stokes: Lost future earnings - \$1,000,000

Non-economic loss - \$350,000

Alexis Stokes: Reimbursement for past infant care - \$200,000

Lost future earnings - \$350,000 Non-economic loss - \$350,000

Taylor Stokes: Non-economic loss - \$350,000

<sup>41</sup> The court does so on the basis of the statute rather than plaintiffs' consent, recognizing that the court's award differs in various ways from the conditions upon which plaintiffs' consent was based.

Alexis and Taylor Stokes: Reimbursement for past medical costs - \$339,245.20

Total damages: \$15,066,245.20

Accordingly, judgment is entered in favor of plaintiffs and against defendant in the total amount of \$15,066,245.20, plus costs and post-judgment interest as allowed by law.

## IT IS SO ORDERED

Dated this 26th day of November, 2018.

JOE HEATON

UNITED STATES DISTRICT JUDGE